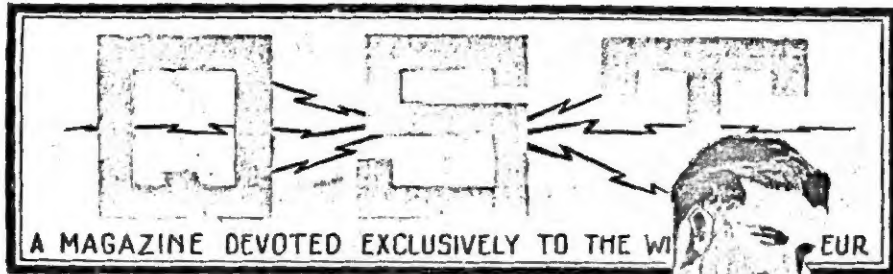


JANUARY

1920

PRICE 15¢



Phoning  
the rush  
message

H.R. HICK

## The First Post-War Trans-Continental

**T**HE first transcontinental relay since the war has occurred! And so easily was it done, and with such little fuss, that it points anew to the possibilities in our work before the winter is over. No special arrangements had been made for a transcontinental relay, and the messages went through the stations which were on the job at the time, the whole affair being marked by its spontaneity.

Here is how it happened. The night, Thursday, December 4th was very favorable in the east—one of those cold crystal-clear nights without a sign of static. Shortly after ten o'clock, Eastern Time, 8DA, Salem, Ohio (old 8JZ) called 1AW, Mr. Maxim's station in Hartford, with the east-bound message. This bore no filing date and it is probable that it was filed on the west coast the night before. The message, received at 10:15 p. m., was from Seefred Brothers, the A.R.R.L. Pacific Division Managers, at Los Angeles and traveled via 6EA, LF (Louis Falconi, Roswell, N. Mex.), 9BT, 8AD, 1AW. It read as follows:

Hiram Percy Maxim  
Hartford Conn

Regards from 6EA  
Seefred

Shortly after this, 1AW was in direct communication for an hour with 9ZN, Chicago, and at 11:15 p. m. Eastern Time Mr. Maxim started this message westward:

Seefred

Los Angeles Calif

Message received OK congratulations  
Maxim

9ZN at first gave the message to Trump, 9BT, at Topeka, but a few moments later LF was hammering in at Chicago and 9ZN seized the opportunity and put the message direct to Roswell. All credit to Trump, though; his handling of the east-bound message, particularly the reach to 8DA, shows what he can do. LF made short

work of it, and at 1:00 a. m. Mountain Time the message was acknowledged by 6EA.

This is splendid. It gives us all that feeling of exultation which comes only with the joy of achievement and seems in its deeper aspects peculiarly an emotion of the radio amateur. From the remarkable ease with which these same distances, and greater, are covered nearly every night, though perhaps not regularly across the whole face of the country on the same night, we will not be surprised when the day arrives when we are able to span the continent nightly with but one intermediate station.

The present work is largely due to the success of LF. Mr. Falconi, by the way A.R.R.L. Superintendent for the District of New Mexico, is most ably taking the place of old 9ZF, Denver, now out of the game, and Higgy of old 6DM, now located in Columbus, Ohio, who were our gateways in the pre-war days. It is interesting to note the only transcontinental route working at present is a combination of several of our regular trunks: the Northern or the Central route across the eastern half of the country, then south down the Mississippi Valley, and west via the Southern route. For some weeks LF has been working actively to bridge the distance, and in middle November succeeded in establishing communication with both 6EA on the west and 5AC, Vick of Houston, on the east. The rest was easy, and the Northern route, with one good intermediate station, could have done the same thing, as it is opened up for reliable communication as far west as North Dakota. The Southern route for short intervals has been opened thru its entire length, traffic having been handled from Los Angeles to Jacksonville via LF and 5AC.

Let us all regard this work as an incentive to greater activity, and hasten the completion of our regular routes whereby traffic may expeditiously and reliably be gotten to all parts of the country.

## With The Affiliated Clubs

The subject of a closer co-operation between the various local radio clubs and the National Organization is becoming of increasing importance. Clubs, broadly speaking, are possible only in the centers, and as there is where the work needs to be done, the system rounds out nicely.

The problem of QRM control in the various centers is becoming most formidable. Amateurs in smaller places can have no adequate conception of the extreme difficulty of any distance operating around the larger cities. There is only one way in which this present intolerable state of

the wave length given at secondary coil, for various the secondary condenser preadjustment of the wave length. Close perhaps plotting of curves around the wave lengths. Incidentally the wave the actual dimensions coils suitable to cover wave length with a and hence will be a coupling couplers for certain work. The large inductance for loading up to the imped signals used in

itself may be used as of the receiver. It is to bridge the rectifying elements around the condenser connect the wave antenna tuning inductance coil if one is in use.

### Inductance and Capacity of a Wave Meter

having been constructed by matter to determine capacity of a condenser. with the unknown condenser inductance, excite the of a buzzer, and determine wave length by means of it. Now transposing the formula

1885  $\sqrt{LC}$

used in microhenries and we obtain

$\lambda^2$

1885)  $\lambda^2 \times L$

the wave length and of the inductance in condenser the capacity of can readily be calculated. in capacity and a coil, the which it is desired to be necessary to connect with the known capacity, by a buzzer and measure length by means of the then solve the transposed equation

$\lambda^2$

1885)  $\lambda^2 \times C$

used in microhenries and

affairs can be remedied so that relay traffic can be handled thru such centers, and that is by organization and constant cooperation. Local clubs in charge of local situations seem the most feasible solution, and the League is vitally interested in the success of such undertakings.

We invite all radio clubs to give consideration to the matter of affiliation with the A.R.R.L. The subject was treated at length on pages 6 and 7 of the August QST, to which attention is asked. The League Secretary will be glad to hear from the local Secretaries on this topic.

The following clubs have now become affiliated societies of the A.R.R.L.

New England Amateur Wireless Assn., Boston.

Radio Traffic Assn., Brooklyn.

Austin Radio Club, Austin Texas.

Council Bluffs Y. M. C. A. Radio Club, Council Bluffs, Ia..

Northern Indiana Radio Assn., Elkhart, Indiana.

Ravenswood Radio Assn., Chicago.

Milwaukee Amateurs' Radio Club, Milwaukee.

Dallas Radio Club, Dallas, Texas.

Houston Radio Club, Houston, Texas.

New Mexico State College Radio Club, State College, N. M.

The Traffic Manager summarizes as follows the service which affiliated clubs can render the League.

1. Control local QRM between the hours of 9 and 12 P.M., so as to avoid interference, as far as possible, with the regular relay work of the League.

2. Co-operate with the District Superintendents of the League for the local distribution and collection of traffic. Each club should appoint one or two stations as distributing centers and all local traffic to or from the regular trunk lines should pass through them.

3. Educate the younger element to obey the radio laws, as follows:

- (a) Any amateur station that transmits and that can be heard by a licensed amateur station, is also required to have a license. The law is specific on this point.
- (b) Transmitting by spark stations with a plain aerial, that is, without an oscillation transformer in the circuit to tune the circuit and keep the decrement down, consequently the wave sharp, is illegal. This particularly applies to spark-coil stations.
- (c) Intentional interference is the worst form of outlawry any station can resort to.

4. Report all new licenses as fast as they are issued to the Secretary of the League, at Hartford, giving name, address and new call letters.

5. The League and QST are not money-making propositions for anybody. It is only desired that they be self-supporting. They are both handled by amateurs, of amateurs, for amateurs. They both depend upon the support of amateurs. United effort saved the amateurs when adverse legislation was introduced at Washington. One big thing local clubs can do is to boost the League, and boost QST by making the membership and subscription list include every known amateur in North America. The stronger the League becomes, the greater protection it can give you against unfair legislation in the future. Boost the League! Two dollars a year includes a membership and QST.

On November 20th a conference of the radio clubs around Greater Boston was called by Mr. Entwistle, and representatives from the various organizations got together and discussed their local problems. We regret very much that lack of space prohibits the report of this congress from appearing in this issue of QST, but it will be presented in the next number as a splendid example of the cooperation possible in the work, and in its excellent suggestions leads us to hope that a vigorous and sincere mutual effort and study of the problem will finally result in the establishment of working conditions around the large cities thru the medium of our affiliated clubs.

Active A.R.R.L. members are everywhere urged to get together and form societies which can exercise a degree of control over local situations so as to assist in relaying, and to affiliate with the parent body. The Secretary will be pleased to communicate and assist.

Recently a number of former Signal Corps members of the Radio Tractor Units doing Radio Intelligence work on the Canadian and Mexican Borders met at the offices of Walter Emmerick & Co., Fourth Avenue and 29th Street, New York, and formed a post of the American Legion to be known as the Radio Intelligence Post.

The following temporary officers were elected: M. K. Jacobs, President; John W. Hubbard, 1st Vice President; G. Bleilevens, 2nd Vice President; A. L. Bernhard, 3rd Vice President; E. Erickson, Secretary; W. A. Kahn, Treasurer; and C. J. Goette, Executive Member of Committee.

All former members of the above Units are cordially invited to correspond with the Secretary, E. Erickson, Harrison N. Y., with a view of joining this Post.